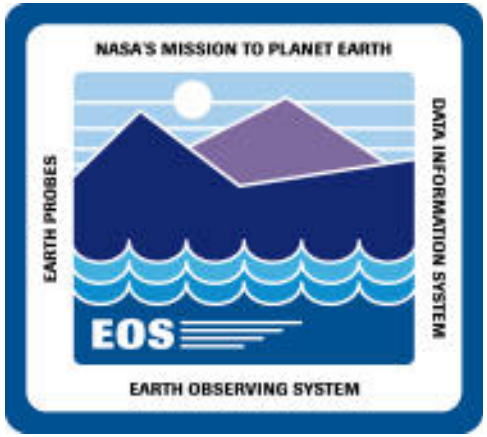


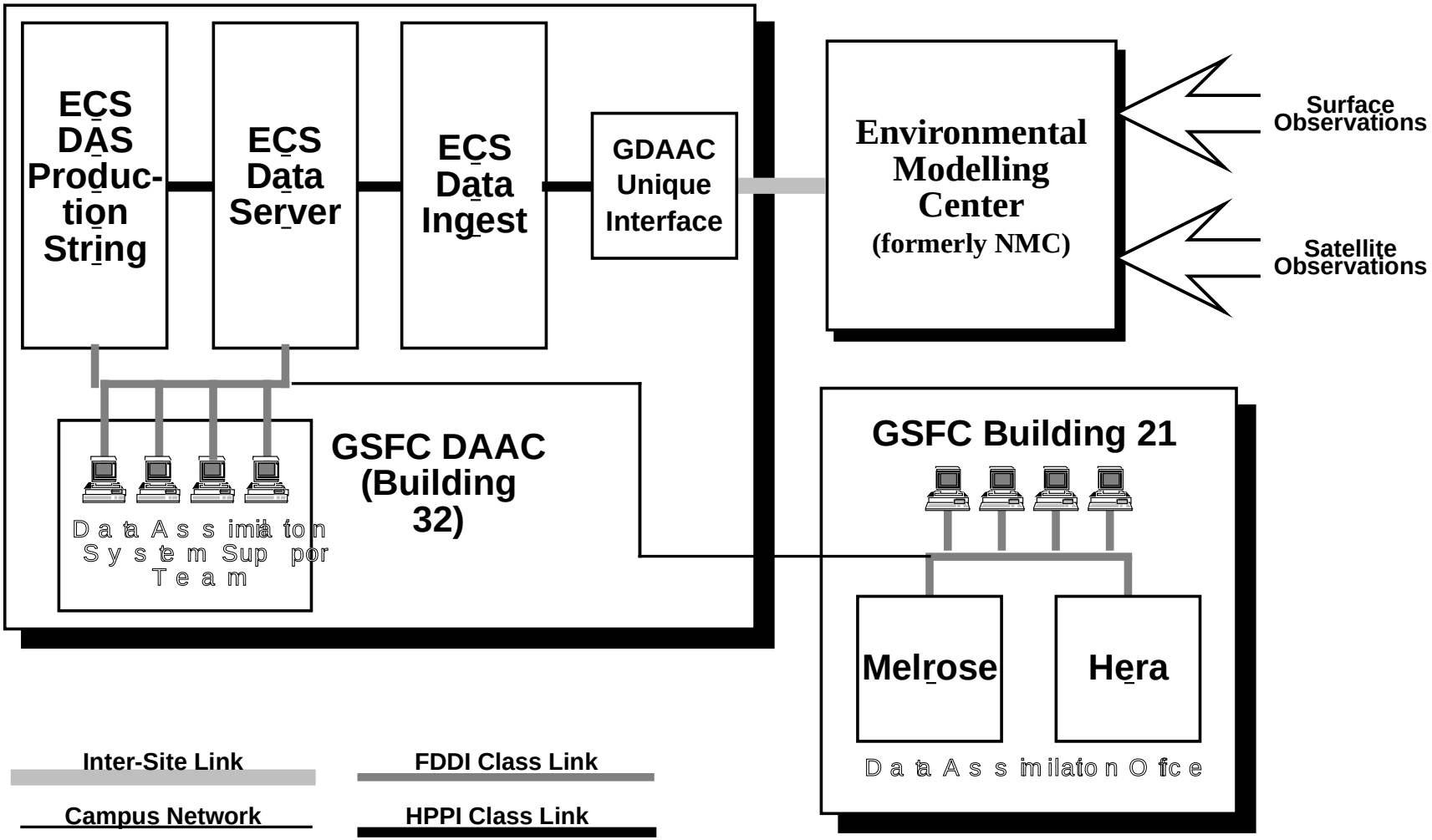
Data Assimilation System

Bill Bass

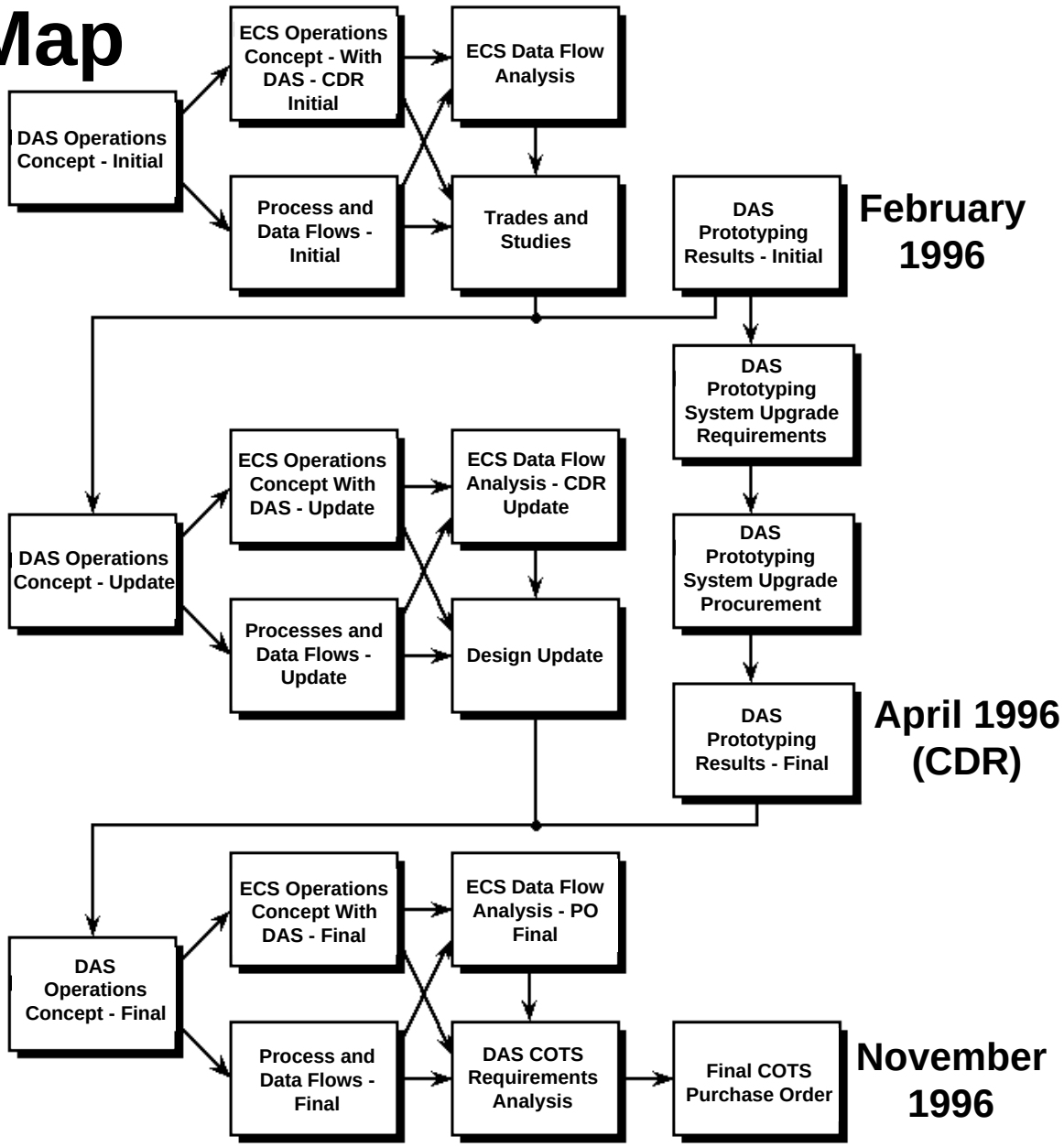
bill@eos.hitc.com

2 November 1995

1998 DAS Configuration



Road Map


DAS Operations Concept - Initial
ECS Operations Concept - With DAS - CDR Initial
Process and Data Flows - Initial
ECS Data Flow Analysis
Trades and Studies
DAS Prototyping Results - Initial
February 1996
DAS Prototyping System Upgrade Requirements
DAS Operations Concept - Update
ECS Operations Concept With DAS - Update
Processes and Data Flows - Update
ECS Data Flow Analysis - CDR Update
Design Update
DAS Prototyping System Upgrade Procurement
DAS Prototyping Results - Final
April 1996 (CDR)
DAS Operations Concept - Final
ECS Operations Concept With DAS - Final
Process and Data Flows - Final
ECS Data Flow Analysis - PO Final
DAS COTS Requirements Analysis
Final COTS Purchase Order
November 1996

Trades and Studies

Subsystem / Area	Questions
Data Processing Subsystem (DPS)	Toolkit: What toolkit capabilities are needed and when? What platforms? Algorithm Integration and Test: Will DAS be AI&T'd on the same hardware that it does operations?
Analysis	Algorithm Instability: What are the implications of DAS' higher than "normal" propensity for failing? Staffing? Scheduling? Resource Management? Research and Development: What are the implications of running uncontrolled and controlled software on the same system? What are the ECS operations concepts for supporting the Research and Development activities?

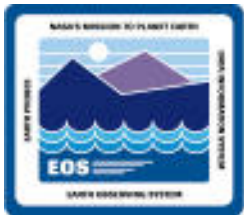
Trades and Studies (cont.)

Subsystem / Area	Questions
Data Server Subsystem (DSS)	Dedicated Mass Storage: What is the best way of satisfying the expressed need for about 8 TB of dedicated DAS mass storage? Data Server Configuration: What data server loads are needed to support DAS and the distribution of its products?
Planning Subsystem (PLS)	ECS Scheduler Compatibility: To what extent does the ECS scheduler meet the DAS' needs? How does the scheduler coexist with Research and Development? ECMWF Scheduler: Can this NDI scheduler better suit DAS? Is it better suited to the COTS thing ECS is using? Multiple Platform Scheduler: How will the ECS scheduler manage a shared memory distributed computing architecture?

Trades and Studies (cont.)

Subsystem / Area	Questions
Operations and Maintenance	Algorithm Delivery Schedule: What is the incremental plan for integrating the DAS with the rest of ECS? What deliveries are required and when?
Infrastructure Support	Communication Fabric: What is the best approach for inter-connecting the DAS hardware? How should the DAS environment be connected externally? Multiple Platform Management: Do ECS management concepts need to be extended for DAS' distributed architecture? Communication Services: Will the use of ECS communication services (e.g. DCE) be required for DAS operations?

Next



Plan Coordination

Kick-off DAO Task Team

- **Multiple Release Support**
- **Development Engineering**
- **Operations and Maintenance**

Develop DAS Transition to Operations Plan